## **Short Answer:**

Answer the following questions with complete sentences in your own words. You are encouraged to conduct your own research online or through other methods before answering the questions. If you research online, please consult multiple sources before you write down your answers. You are expected to be able to explain your answers in detail (Provide examples to each question).

- 1. In your own word, please describe some of the advantages and disadvantages of a Monolithic Application.
- 2. In your own word, please describe some of the advantages and disadvantages of a Microservice Application.
- 3. What is the purpose of using Service Discovery?
- 4. How can microservices communicate with each other?
- 5. What is the purpose of using API Gateway?
- 6. What is CAP principal?
- 7. Explain cascading failure in microservice and how to prevent it
- 8. What is Circuit breaker and its states?